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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,415	09/24/2001	Yasuyuki Anami	04739.0072	5646

7590 09/21/2004
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EXAMINER

NGUYEN, KIMBINH T

ART UNIT PAPER NUMBER

2671

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/960,415	Applicant(s) ANAMI ET AL.	
	Examiner Kimbinh T. Nguyen	Art Unit 2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>9092004</u> |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to amendment filed 06/16/2004.
2. Claims 1-5 have been canceled; accordingly, claims 6-11 are pending in the application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 6-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Because the limitations "a procedure for adjustment that becomes necessary as a result of modification applied to the modification candidate process from among the process history data indicative of the processes prior to execution of the modification"; "the design support system displays the adjustment procedure images in response to a command before the modification is executed". These limitations were added in the independent claims 6 and 8-11 and were not described in the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (5,844,563) in view of Freitag (5,615,317).

Claim 6, Harada et al. discloses holding process history data of a series of processes (a modification history data file 30 which stores records of modification of the model object; col. 5, line 44 through col. 6, line 6; figs. 3, 4 and 11); receiving a command for modification as a modification candidate process from among the series of processes (a first command, "straight sweeping" and its command ID of 1 are stored in a node 24; col. 6, lines 6-11; fig. 4); adjustment that becomes necessary as a result of modification candidate process (these faces may be updated as necessary during a complex updating procedure; col. 6, lines 59-60) from among the process history data indicative of the processes prior to execution of the modification (re-executing a past command; redesigning intermediate stages of the design process; col. 8, line 49 through col. 10, line 29; figs. 4 and 11); creating a series of adjustment procedure images according to the procedure for adjustment specified (col. 12, lines 52-54). Harada et al. does not teach displaying the adjustment procedure images in response to command; however, Freitag teaches displaying the adjustment procedure images (displaying command menu is the addition or removal of certain parts from the object displayed on the screen; col. 4, lines 27-34) in response to command before the modification is executed (the object displayed on the screen in a desired way, and specially to define those parts of the displayed object (before the modification is

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executed) where he wants to make modifications; col. 4, lines 45-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the displaying adjustment procedure of 3D modeling system before the modification is executed by using a command menu as taught by Freitag into a design modification data structure of 3D modeling taught by Harada for designing a 3D model based upon modification history, because displaying menu option such as addition or removal of parts of the displayed images, it would allow a user to modify the object displayed on the screen in a desired way, and specially to define parts of the displayed object where the user wants to make modifications (col. 4, lines 46-49).

Claim 7, Harada et al. does not teach displaying a list for the procedure for adjustment specified; however, Freitag teaches displaying a list (command menu) for the procedure for adjustment specified (menu option is the addition or removal; col. 4, lines 27-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate displaying a list for adjustment procedure of 3D modeling system as taught by Freitag into a design modification data structure of 3D modeling taught by Harada for designing a 3D model based upon modification history, because it would allow a user to modify the object displayed on the screen in a desired way, and specially to define parts of the displayed object where the user wants to make modifications (col. 4, lines 46-49).

Claim 8, claims a design support method having the claimed element same as claim 1; therefore, the rationale provided in the rejection of claim 6 is incorporated herein.

Claim 9, Harada et al. discloses inputting a process to serve as a modification candidate process (a first command "straight sweeping" and its command ID of 1 are stored in a node 24, col. 6, lines 6-7; fig. 4); specifying a process (straight face sweeping process, col. 8, lines 22-24; fig. 10) to influence of modification applied to the modification candidate process associated with the process input (the given command performs its specified operation upon the elements referred by an indirect index, col. 8, lines 5-6) from among the series of processes (a series of processes of fig. 11) indicative of the processes prior to execution of the modification (col. 8, line 49 through col. 10, line 29; figs. 4 and 11). Harada does not teach displaying the process specified as being subjected to the influence; however, Freitag teaches displaying the process specified as being subjected to the influence (addition or removal) before the modification is executed (the object displayed on the screen in a desired way, and specially to define those parts of the displayed object (before the modification is executed) where he wants to make modifications; col. 4, lines 45-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the displaying the object displayed on the screen in a desired way, and specially to define those parts of the displayed object (before the modification is executed) as taught by Freitag into the Harada's teaching for displaying the blended object (the specified process), because it would provide a method of blending operation in a 3D CAD device which is capable of storing a graphical representation and displaying it 3D in an isometric view and which allows a user to modify this representation interactively (col. 1, lines 16-20).

Claim 10, the rationale provided in the rejection of claims 6 and 8 are incorporated herein. In addition, Harada does not teach a computer readable recording medium; however, Freitag discloses a computer readable recording medium (a mass storage device such as a magnetic or an optical disk; col. 4, lines 19-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a computer readable medium taught by Freitag into the system for modeling 3D solid model data based upon modification history taught by Harada for designing a 3D model object with an automatic updating feature which correctly and efficiently updates, because using the program memory contains instructions, it would create and manipulate of the geometric object under design (col. 4, lines 19-23).

Claim 11, the rationale provided in the rejection of claims 6 and 7 are incorporated herein.

Response to Arguments

7. Applicant's arguments filed 06/16/04 have been fully considered but they are not persuasive, because claims 6 and 8-11, Harada teaches adjustment that becomes necessary as a result of modification candidate process (these faces may be updated as necessary during a complex updating procedure; col. 6, lines 59-60) from among the process history data indicative of the processes prior to execution of the modification (re-executing a past command; redesigning intermediate stages of the design process; col. 8, line 49 through col. 10, line 29; figs. 4 and 11); and Freitag teaches displaying the adjustment procedure images (displaying command menu is the addition or removal of certain parts from the object displayed on the screen; col. 4, lines 27-34) in response to

command before the modification is executed (the object displayed on the screen in a desired way, and specially to define those parts of the displayed object (before the modification is executed) where he wants to make modifications; col. 4, lines 45-49) (see the Final Office Action). For these reasons, the rejection of claims 6-11 are maintained.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (703) 305-9683. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

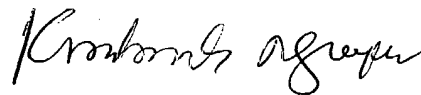
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (703) 305-9798. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 15, 2004

A handwritten signature in black ink, appearing to read 'Kimbinh Nguyen', written in a cursive style.

Kimbinh Nguyen

Patent Examiner AU 2671